

Notice of Allowability

Application No.

10/822,542

Examiner

BINH Q. TRAN

Applicant(s)

JACAB ET AL.

Art Unit

3748

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☒ The drawings filed on 12 April 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 11/24/2004
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


BINH Q. TRAN
Primary Examiner
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EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Robert Becker (Reg. No. 26,255) on July 26, 2005. During telephone conversation with Mr. Becker, agreement was reached to amend Claim 6.

The application has been amended as follows:

IN THE CLAIMS:

- **Claim 6 has been amended as below.**
- In claim 6, line 4, the phrase " Table of " has been inserted before -- Fig. 9--.

The above changes to Claim 6 has been made in order to correct indefinite claim language.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance: The prior art fails to disclose or render obvious the claimed combination including a free exhaust gas inlet surface of the at least one catalytic converter is considerably smaller than a free exhaust gas inlet surface of

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the at least one particle separator; wherein an aspect ratio $AR = L/\Phi_{eff}$ of the at least one preliminary oxidation catalytic converter is approximately between 0.4 and 0.6; wherein an aspect ratio $AR = L/\Phi_{eff}$ of the at least one particle separator 16 is approximately between 0.5 and 1.0; wherein a volume of the at least one preliminary oxidation catalytic converter is between approximately 2.5 and 4 liters, wherein a volume of the at least one particle separator is between approximately 5.5 and 22 liters, and wherein a ratio of the volume of the at least one catalytic converter to the volume of the at least one particle separator is between approximately 0.15 and 0.55; wherein a ratio of the aspect ratio of the at least one particle separator 16 to the aspect ratio of the at least one preliminary oxidation catalytic converter is between approximately 1.05 and 2.2; and wherein at a maximum exhaust gas volume of flow (Nm^3/h) a channel velocity in the at least one preliminary oxidation catalytic converter is greater than 8 m/sec and in the at least one particle separator is greater than 5 m/sec, wherein the maximum exhaust gas volume flow is delimited by a maximum permissible pressure loss, and a maximum permissible exhaust gas counter pressure with respect to a functionality of the internal combustion engine supplying exhaust gas.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of six patents:

Pawson et al. (Pat. No. 6722124), Olivo (Pat. No. 5285640), Woerner et al. (Pat. No. 6729127), Wagner et al. (Pat. No. 4899540), Hayashi et al. (Pat. No. 4916897), and Hough et al. (Pat. No. 5063736) all disclose an exhaust gas purification for use with an internal combustion engine.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Binh Tran whose telephone number is (571) 272-4865. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reach on (571) 272-4859. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BT
August 04, 2005



Binh Q. Tran
Patent Examiner
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